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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,575	05/13/2002	Thian Liang Ong	2001-1012	6348
466	7590	11/02/2005	EXAMINER	
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			SAXENA, AKASH	
			ART UNIT	PAPER NUMBER
			2128	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/031,575	Applicant(s) ONG, THIAN LIANG	
	Examiner Akash Saxena	Art Unit 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/22/02</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-17 have been presented for examination based on the application filed on 13th May 2002.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. S990535 (& PCT/NL00/00513) filed on 07/21/1999 (07/21/2000).

Information Disclosure Statement

3. Prior art EU 10216361 filed in IDS is important to prosecution of current case and a examiner requests a English translation of the European application.

Claim Objections

4. Claim 15 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.
5. A markup copy of the claims was used to prosecute this case. Typographical errors might have been present in the markup claims. Examiner requests a updated copy of claims.
6. Claim 14 has language containing "and thereto back referring claims", suggesting to the examiner of multiple dependent claim. Examiner respectfully requests clarification or amendment to the language.

Specification

7. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Abstract in the current application is about 177 words, exceeding the specified limit.

Appropriate corrections are required.

8. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.

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(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 1,6, 7, 9 and 14-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 1

Claim 1 discloses a system with no tangible support for such a system in either the preamble of the components. Mere recitation of system does not make a system tangible. Hence the claim is deemed vague and indefinite.

Further, claim 1 recites the limitation “a satellite navigation system, or a thereto-related system”, which makes the claim vague and indefinite as to what constitutes a “there-to related system” and what system is being referred, one being claimed or the navigation system.

Regarding Claim 6

Claim 6 discloses a “a suitable memory” which makes the system disclosed indefinite as there is no indication in either specification or the claims as to what feature will make a memory “unsuitable”. Further, there is no indication in the claim about the kind of storage media that can be defined as “suitable memory”.

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Regarding Claim 7

Claim 7 discloses memory to be formed of “compact disc, or a similar device”. There is no definition provided as to what constitutes a of a similar device making definition of memory vague, hence qualifying paper and pencil used to store information.

Regarding Claim 9, 14

Claim 9 discloses a limitation of “transferring through a suitable transfer medium from a suitable source to the system”. Again, the claim 9 & 14 is objected for the same vagueness as shown for claims above.

Regarding Claim 15

Claim 15 discloses storing “special events”. There is not indication in the claims or the specification as to what constitutes a special event. Claim is hence deemed indefinite. Further, There is insufficient antecedent basis for this limitation in the claim.

Regarding Claim 16

Claim 16 recites the limitation “so called ‘virtual reality –helmet’” and provides not antecedent basis for it in either claims or specification. Claims should be recited in clear manner. The phrase “so called” makes the claim open to context-based interpretation. Further, without clarification/definition of the phrase “virtual reality-helmet” makes the claim lack antecedent basis for this limitation.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-10 & 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,080,063 issued to Vinod Khosla (Khosla hereafter).

Regarding Claim 1

Khosla teaches a system for simulating events in a real environment containing static objects and dynamic objects as moving cars & scenery (Khosla: Col.8 Lines 16-29); position locating means for continuously determining the real environment the position of the dynamic objects in relation to the static objects within a time period in which the event takes place (Khosla: Col.3 Lines.59-63); storage means for storing data describing the dynamic and static objects of the environment (Khosla: Col.3-Line 59- Col.4 Line 52; Particularly Col.4 Lines 48-50; Fig.3 Element 320); processing means for processing data from the storage elements describing the static and dynamic objects data from the position locating unit indicating at a certain moment the mutual positions of the static and dynamic objects of the environment,

the processing elements being loaded with simulation software (Khosla: Col.3-Line 59- Col.4 Line 5; Fig.1-3; Col.); display elements for displaying a simulated view from a selected viewpoint on the simulated environment as a result of the processing by the processing elements(Khosla: Col.5 Lines 60-65); control elements to repeat the functioning of the processing and display elements for a range of consecutive time moments which together determine the above-mentioned time period (Khosla: Col.3-Line 59- Col.4 Line 52; Col.7 Lines 1-3, 26-37- Playback & recording; Col.7 Lines 61-67 - Display); wherein the position locating unit includes a satellite navigation system, or a thereto-related system (Khosla: Col.3-Line 59-63).

Regarding Claim 2

Khosla teaches storage means, processing means, display means, and control means are installed as a user terminal at a place re-mote from the real environment and that transfer means are used to transfer positional data from the position locating means to the storage means (Khosla: Fig1-3; Col.3 Line 33- Col.5 Line16).

Regarding Claim 3

Khosla teaches each user of the system storage means, processing means, display means, and control means are installed as user terminals at a place remote from the real environment (Khosla: Fig1-3; Col.3 Line 33- Col.5 Line16) and that transfer means are used to transfer positional data from the position locating means to all said storage means (Khosla: Col.4 Lines 54-67).

Regarding Claim 4

Khosla teaches Internet is used as transfer means (Khosla: Col.4 Lines 55-58).

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Regarding Claim 5

Khosla teaches telephone network is used as transfer means (Khosla: Col.4 Lines 66-67).

Regarding Claim 6

Khosla teaches that during the whole time period of a competition all positional data together with corresponding time data are stored in a suitable memory, which memory can be used after the competition as transfer medium (Khosla: Col.7 Lines 26-37).

Regarding Claim 7

Khosla does not teach memory is formed by disk (Khosla: Fig.3 Element 320).

Regarding Claim 8 & 10

Khosla teaches that the system comprises a competitor's database in which data about a number of possible competitors are stored so that, after the competitors for a particular event or competition are known, the simulation of the real competitors within the simulated environment can be adapted; that data about competitors which are not present in the competitor database can be transferred through a suitable transfer medium from a suitable source to the system to become stored in said competitor data-base; (Khosla: Col.6 Lines 12-17; Col.7 Lines 38-45; col.8 Lines 59-67; col.9 Lines 4-11; Fig.1); competitors database is integrated into the user terminal (Khosla: Col.7 Lines 1-2).

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Regarding Claim 14

Khosla teaches that special events, which will happen during the real competition, are stored as separate image data in said memory respectively CD (as disk), such that these images can be displayed at suitable time moments during the simulated competition (Khosla: Col.7 Lines 4-25; Fig.3).

Regarding Claim 15

Khosla teaches that special events, which will happen during the real competition, are stored as separate image data in said memory respectively CD, such that these images can be displayed at suitable time moments during the simulated competition (Khosla: Col.6 Line 49 – Col.7 Line 25 - Image delay & synchronization).

Regarding Claim 16

Khosla teaches display means for displaying the simulation of at least part of the environment with the dynamic objects therein is formed by a so-called “virtual reality-helmet” as virtual driver’s view (Co.7 Lines 61-67).

Regarding Claim 17

Khosla teaches storing data on disc comprising positional data and corresponding time data (Khosla: Col.3 Lines 60-63; Fig.2) of at least a number of competitors to the real competition during at least part of a real competition (Khosla: Col7-9; Live event simulation example). Time data can be derived from speed and position and is also implicitly part of the GPS data.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claim*** rejected under 35 U.S.C. 103(a) as being unpatentable over applicant own admission of the prior art (Background hereafter), in view of U.S. Patent No. 6,080,063 issued to Vinod Khosla (Khosla hereafter).

Regarding Claim 1

Background art admitted by the applicant indicates that static and dynamic position locating means for continuous determination in real environment for simulating a real environment event is known in the art (Specification: Pg.1 Line30-Pg.2 Line 3).

Novel feature lacking in the EP07735514 is satellite navigation, which the Background teaches to be present in another application (Specification: Pg.12 Line 32- Pg.13 Line 18). Further, Drawback presented was lack of the use of data collected for the purpose of simulation, remote storage, processing, display, and

control of the event. Other components of the system disclosed are implicit in the Background.

Khosla overcomes the limitations and drawbacks disclosed by the applicant in the prior art. Teachings of Khosla are disclosed above in 35 USC 102 rejection.

It would have been obvious to one (e.g. a designer) of ordinary skill in the art at the time the invention was made to use the teachings of Khosla with applicant's own admitted prior art. The motivation to combine would have been that Khosla teaches obtaining the position locating information through satellite navigation (Khosla: Col.3-Line 59-63) and applicant admitted prior art (EP 0773514) has a drawback (Specification: Pg.11 Lines 4-6), which Khosla teaches/solves through use of GPS. Khosla and admitted prior art are analogous except satellite navigation and combining them teaches the limitation of instant application.

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12. Claim 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent No. 6,080,063 issued to Vinod Khosla (Khosla hereafter), in view of U.S.

Patent No. 5,921,780 issued to Nicholas J. Myers (Myers hereafter).

Regarding Claim 11

Teachings of Khosla are shown in the claim 1 rejection above.

Khosla does not explicitly teach environment database, but it would be necessitated through obviousness that such a database instance to be present to create the virtual 3D model from the GPS data received (Khosla: Col.7 Lines 61-67).

Myers teaches system comprises an environment database in which data about a number of possible competition environments are stored so that, after the specific environment where the competition will be held is known, the simulation of environment can be adapted to the choice of the real environment (Myers: Fig.1-2, Col.8 Lines 39-60).

It would have been obvious to one (e.g. a designer) of ordinary skill in the art at the time the invention was made to apply the teachings of Myers to Khosla to have a selectable venue choice. The motivation to combine would have been that Khosla is combining simulation data with the GPS information to create simulation (as explained above the need for database by Khosla), and Myers teaches simulation racecar where selection criteria for various environment options (venue/setting/cars) are available (Myers: Abstract; Khosla: Fig.5).

Regarding Claim 12 & 13

Myer teaches environment database (as shown above) and Khosla teaches that the data which is not contained in the environment database, can be transferred from a suitable source to the system through suitable transfer means to become stored in database (Khosla: Col.9 Lines 4-11; Fig 2).

Conclusion

13. All claims are rejected.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. There are numerous patents cited some of which read directly on the independent claim.

15. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

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Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akash Saxena whose telephone number is (571) 272-8351. The examiner can normally be reached on 8:30 - 5:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean R. Homere can be reached on (571)272-3780. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Thursday, October 27, 2005


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